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Original Communications.

AMPUTATION BY THE COMBINATION PLAN.

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In the *American Journal of the Medical Sciences* for January, 1870, Dr. Stephen Smith, of Bellevue Hospital, has an article on "Amputation at the Knee-joint by modified Lateral Flaps." He approvingly quotes the following statement from Markoe:—

* * * "It is really of comparatively little consequence what particular method of cutting the flaps be adopted, provided only that enough integument be left amply and easily to cover the expanded extremity of the femur." With a high regard for the above names, let me ask is not the "method of cutting" one prominent question to be discussed? How shall we know when we have enough, and not too much, except by some "method of cutting"? We answer, a definite rule to secure this end, without mistake or failure, is reached by the combination plan. This plan fell to me to work out while in the United States service, a few years ago, and only now fully described; although Dr. Smith, having obtained the points from myself, has published much of it as a contribution to surgical knowledge, leaving the reader to infer it was wholly his own.

The amputations made in the First Division of the Fifteenth Army Corps, following the assault on Vicksburg, and the taking of Arkansas Post, were by the circular, by transfixion, and antero-posterior flaps, as generally made. The results thereof were often so troublesome, vexatious, and unsatisfactory, we resolved on a new method. Erichsen gave a hint to compromise between the circular and that of transfixion, wherein is combined the advantages of both, without their defects.

The first case operated on by the combination method, was a soldier in the Fourth Iowa Volunteers, in December, 1863, at the

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foot of Lookout Mountain, near Chattanooga, Tenn. Amputation below the knee as follows:—

With a scalpel or cartilage knife, an incision is commenced at the posterior side of the leg, and carried in a downward semi-circular sweep, to the crest of the tibia, just through the integument. The lowest deflection of the sweep is nearer the posterior leg. The same cut, beginning and terminating as before on the opposite side, completed, the skin is then retracted as in the circular operation, which lays bare the muscles for the space of an inch. (See Fig. 1). Then transfix the inner side and

FIG. 1.



cut outward, as in other flap operations, dividing the muscles an inch shorter than the retracted integument. The scalpel or cartilage knife is used to divide the muscles on the fibular side. The saw is now applied at an angle of forty-five degrees, and a diagonal cut made three-fourths of an inch deep; when the direction of the saw is changed, and the bones and wedge shape

[WHOLE No. 2232.]

chip are severed together by a transverse cut. (See Fig. 2).

FIG. 2.

Removal of the wedge shape chip from the spine of tibia stump, also removes an old objection, viz., the danger of the sharp bone cutting through the thin integument by ulceration. The flaps thus obtained make a fine, smooth and conical stump, without any crowding or stretching, and without redundancy. They are of equal size. The surgeon is not puzzled with the task of trying to fit a four-inch flap to a six or eight-inch fellow. This plan presents many advantages over every other "method of cutting the flaps."

1. The avoidance of all after-trimming.

2. Quicker and more certain union by first intention.

3. Drainage is complete, and pockets of ichor and pus avoided.

4. The stump presents no puckering or pouting corners.

The operation proved so superior and satisfactory in the above case that it was adopted by several surgeons in our division of the army thereafter, for all amputations of leg, thigh and arm.

In all cases the stump is traversed by the cicatrix. Dr. Smith, and others, object to this result on the ground that it is "not firm and resisting, and not adapted to take direct support." This is a groundless fear, and has been long a bug-bear, and innocent obstacle to the work of the surgeon; for direct pressure on the stump is never borne, and never allowed. All successful leg-makers permit no floor for the stump to touch or rest on; but support the entire weight of the body by the sides of stump, the condyles of the knee, and the tuberosity of the ischium.

In a cavalry boy, at Kenesaw Mountain, Ga., in January, 1864, whose leg was amputated by the above method in the lower third of the femur, it became necessary to



re-open the stump to secure a bleeding artery, twenty-four hours after the operation. It was gratifying to witness how promptly the flaps had become glued together in initiatory union, requiring considerable force to separate them.

At the close of the war, while our division was encamped at Alexandria, near Washington, in May, 1865, Dr. Smith, while visiting the several divisions of the army, called on us; and on learning the particulars of our operation, expressed interest in it, and gratification at the result. He remarked that it was new to him, and inquired about its origin. Fergusson speaks of an operation (*Lancet*, July, 1865), as the "compromise," and thinks it appropriate for the thigh and arm. But he transfixes the integument and cuts the deeper parts by the circular sweep. He therefore does not describe or follow our plan, which we believe suited to nearly all amputations; and when below the knee, it is infinitely superior to all others.

COUP DE SOLEIL FOLLOWED BY PARALYSIS.

By A. W. CATLIN, Brooklyn, L. I.

As the following case of sunstroke is conceived to be rather unique in its history, and interesting in its rapid response to treatment, I beg leave to ask a small space in your JOURNAL for its communication.

On July 20th, the patient, a boy of only three years of age, was brought into the house overcome with the heat. He had been playing for some time with his companions, without any protection to his head and neck while under the direct rays of a scorching sun; and, when found, he was constantly complaining of his head, with great heat and redness of the surface; great heat in head, and symptoms of brain congestion. The patient was constantly inclined to sleep, and, when roused, acted strangely. He did not seem to recognize any one. Pulse high; constant demand for water, &c. This occurred on Wednesday, but no medical advice was called in until the following Sunday, when the mother became alarmed, having noticed, the evening previous, for the first time, the child's complete inability to raise or use its right arm.

July 24th.—The little patient was found very much in the condition described above, though not quite so drowsy as he had been. Very irritable, and afraid of all but his mother. Found the right arm com-

pletely powerless, hanging limp and useless at the side. Pupil on that side largely dilated. Lower limb not involved. Walks perfectly well. Treatment—cold to the head, previously shaved; mustard to the nape of the neck; mustard pediluvium three times daily; potassium bromidum, three grains every three hours. Nourishment, beef tea.

July 31st.—Child much improved as to head symptoms. Acts naturally. Eats with some appetite, and seems interested in the games of his brothers around him. Right arm as before, save a slight flexor power in fingers.

Aug. 1st.—Commenced the use of electricity to-day, using Jerome Kidder's improved apparatus, current B-D. Mother takes it at the same time, so that its strength can be better estimated. Moist sponge; positive pole was applied to the cervical region of the spine, along the line of the brachial plexus, to the arm, and fingers which the mother held, she having negative pole in her right hand.

Aug. 6th.—Muscular power increasing; able to flex forearm on arm.

Aug. 8th.—Improvement still going on. Complication of worms called for special treatment, and *ol. chenopodii* resulted in the child passing a dozen or more, of the species *ascaris lumbricoides*.

Aug. 30th.—The applications have been continued through the past two weeks every second or third day. The record states that the child is now able to raise the whole arm from the shoulder, and, with the exception of a slight hesitancy and slowness of movement, it is entirely restored.

Sept. 8th.—Quite well, but pupil on that side still slightly dilated.

This case is interesting and instructive, reminding us of the fact that children, even of tender years, are liable to sunstroke, and should be guarded therefrom; that the brain congestion which follows may be so intense as to result in effusion and hence paralysis. (Austin Flint, however, states that paralysis is neither a concomitant nor a sequel to insolation.) To what, then, are we to ascribe the loss of muscular power in this case? The child had received no fall or injury; that point was carefully inquired into, and, previous to this exposure to the sun, was perfectly well.

Attention is also called to the prompt and complete recovery which followed the use of electricity. We have used this agent before (not in similar cases), with but partial success.

DEFECTS OF OCULAR REFRACTION, &c.

(Continued from page 266.)

LECTURE II. PART II.—*Relative Accommodation. Action of Glasses when used to assist Vision.*

THERE is a relation between the accommodation and the convergence. Suppose, as normally is the case, that, when the visual lines are parallel, being directed to a distant object, each eye is then accommodated for parallel rays. If the visual lines subsequently converge to a point at a less distance a , each eye must then be accommodated for the new distance and must accordingly add to itself an amount of refractive power, 1 divided by a , over and above what it had when the visual lines were parallel. Thus a certain action of the accommodation becomes associated with a certain convergence.

Donders has experimentally shown that for a given convergence the adjustment admits of a certain range, called the relative range, that is, the range relative to the particular convergence; the relative near-point being nearer, and the relative far-point being farther than the point of intersection of the two lines of vision, at which we suppose the object. It also appears from Donders's diagrams that for different convergences there are respectively different far-points; as if the eye has a different refraction for different convergences. This last circumstance may be explained by supposing that the effort to converge carries with it a corresponding effort to accommodate, and that the latter cannot be relaxed entirely so long as the former continues. According to Helmholtz, the cornea does not change its curvature in accommodation for near objects, and Knapp's observations tend to show that the lens admits of sufficient change to account for accommodation. Otherwise we might have hoped to explain the approach of the far-point for an increased convergence by supposing an elongation of the eye caused by pressure from without accompanying the convergence.

With regard to the measure of the relative accommodation, the amount by which the eye can accommodate nearer than the object for the particular convergence is called the positive part; and the amount by which the accommodation can be relaxed beyond the object is called the negative part.

Donders distinguishes three meanings of the expression, range of accommodation;

the *absolute*, the range from the absolute farthest point to the absolute nearest point for each eye separately; then the *binocular range*, that from the farthest point for both eyes at once to the nearest point for both eyes at once; and, finally, the *relative*, the range for a particular convergence, and which varies with different convergences.

The methods of determining the far-point will be given subsequently. The near-point of binocular vision may be determined by finding *how near* fine print can be easily read. If the eyes are so presbyopic that ordinary print cannot be read at all without glasses, we may let them look through convex glasses, of $\frac{1}{12}$ or $\frac{1}{24}$ or others, and find the binocular near-point of the eyes *when looking through these glasses*; we can calculate the distance for which the eyes themselves are then accommodated, and take this distance as that of the binocular near-point without glasses, but only by way of approximating, because the latter corresponds to a convergence less than that under which the former was observed.

We come now to some general considerations upon the action of glasses when used to assist vision.

In the first place, it is evident that if there is a considerable range of accommodation, the eye can see distinctly an object at a given distance *through different glasses* according as more or less of the disposable accommodation is used; the less accommodation is used, the stronger glass is needed.

We have seen that the refractive power of a given eye may be divided into two parts: a relatively constant part, *the refraction*; and a variable, *the accommodation*. Now a glass, being constant, may be considered when placed before the eye as added to the constant part of the refractive power of the eye; and as on this latter depends the far-point, we may say that *the glass alters the far-point*; that is, we have a new system, the eye combined with the glass; the far-point of this system is different from that of the eye alone.

The far-point being changed, of course the accommodation required to see distinctly a point at a given distance would be different. This last also appears directly without reference to the far-point; for glasses alter the directions of the rays proceeding from an object; they cause them to meet the cornea with different directions from those which the rays would have, if the glass were not present. A different amount of accommodation is then required to see distinctly the given object.

Although manifestly glasses do not di-

rectly increase or diminish the faculty of change in the crystalline lens, from which accommodation results, yet as this change now takes place in a different system, the eye combined with the glass, its effect as measured by Donders's formula becomes somewhat different, if we take into account, as we must, the distance between the glass and the anterior nodal point of the eye.

As the *amount of disposable accommodation* depends in part on the mutual convergence of the two axes, it will be *indirectly affected by glasses*, if these latter should occasion an alteration of the convergence; as is the case with prismatic glasses; also with concave glasses, which, by allowing the object to be seen at a greater distance, give rise to a less convergence of the optic axes.

Also, as glasses change the amount of accommodation required to see distinctly the given object, and as the diminished exercise of accommodation tends to bring about a diminution of convergence, *therefore glasses may alter the convergence*. This bears on the use of convex glasses after operation for strabismus.

Again: Spherical glasses change the size of the retinal images, convex increasing it and concave diminishing it, and in consequence influence our judgment as to the size, distance and form of the objects.

The range of distinct vision must depend on the variable part of the refractive power, that is, on the accommodation. If this is very limited, then the range of distinct vision (in so far as this latter depends on distinct retinal focusing), must also be small, and if a given glass in such case suited the eye for near objects, the same glass would not suit it for the distance. This is especially the case with eyes after the operation for cataract in which, owing to the loss of the instrument of accommodation, the crystalline lens, the accommodation is reduced to zero, and, as is well known, a glass of about $2\frac{1}{2}$ inches focus is generally required for reading, and one of about $3\frac{1}{2}$ inches focus for distant objects. The first of these exceeds the last by a glass of $8\frac{1}{2}$ inches focal distance, just the additional refractive power required for seeing at $8\frac{1}{2}$ inches.

Again, in presbyopia (which consists in a diminution of effective accommodation, whereby the near-point is pushed off, coming on with advancing years), if the eye is emmetropic, no glass is required for distance and a convex for near objects.

Again, a myopic eye may become presbyopic, and a convex lens may be required

for reading while a concave is necessary for distance.

In looking in a general way at the selection of glasses there are particularly two elements to be considered: the maintaining of the required refractive power of the eyes and of the required convergence. These two elements are mutually dependent, or associated. If the convergence is increased, the refractive power tends to become greater also; and if we accommodate more, the eyes tend to turn in.

The age of the patient must also be taken into account; for with advancing years the accommodation diminishes, and late in life the far-point also recedes a little.

The more obvious general theory according to which to conceive the selection of glasses is as follows: assume that the required convergence together with a certain degree of accommodation can be easily maintained. If this amount of accommodation is not adapted to see distinctly an object at the intersection of the visual axes for the particular convergence, then use the proper glass.

If the required convergence cannot be maintained, the deficiency might be supplied either by prisms or by tenotomy, and then the glass selected as above.

Supposing a convex glass needed for a given distance, say 12 inches, as would be the case if patient saw with difficulty at that distance, but better at a greater distance, what glass would be needed? It is evident the artificial help required would be less according as the eye itself maintained more accommodation. It cannot be said beforehand how much accommodation the eye itself can maintain easily and consistently with the required convergence. If we suppose two-thirds of the binocular accommodation can be used, then we could take as first trial the following glass: for 12 inches distance, supposing the eye emmetropic, the difference between glass $\frac{1}{3}$ and $\frac{2}{3}$ of the binocular accommodation. Glass $\frac{1}{3}$ would, in the case of emmetropia, do all the work; this glass, however, would be too strong, as the eye will by its accommodation naturally do a part.

If the glass thus selected should suit best for a distance greater than 12 inches and not satisfactorily for 12 inches, we must try a stronger one.

This view leaves much to direct trial, and yet it is quite consistent with a remark of Donders, who writes in the chapter on Presbyopia, pp. 219-220, "Easy as it is to decide whether a necessity exists for the employment of convex glasses, so difficult

is it to establish rules for ascertaining the degree of convexity required."

Another plan, according to which the selection of glasses might be conceived, is as follows. Suppose the eyes can see well at a certain distance somewhere between the binocular near-point and far-point, say at distance 18 inches. Then if it is desired to read at the less distance 12 inches the required glass must give to rays from point at distance 12 inches directions as if they came from a point at distance 18 inches, and prisms of not quite 4° with bases inward must be worn to make the two virtual images coincide in the median plane at the distance 18 inches (the real object being meanwhile at distance 12 inches). Each eye is then directed to, and accommodated for the distance of, the corresponding virtual image, which takes the place of an object; as the two virtual images coincide, the two eyes are then accommodated for the point at the intersection of the two visual lines, as in ordinary binocular vision without glasses; it is supposed that the eyes can easily maintain the requisite accommodation and convergence.

In the usual method of using convex glasses, without prisms, both eyes are directed to the real object, but accommodated for a point farther off, so that the two virtual images, corresponding to the rays as refracted by the lenses, do not coincide. Nevertheless, the object is not seen double, unless the glasses are so strong that the eyes, in relaxing their accommodation to the required degree, are obliged to diminish their convergence also, and thus, no longer being both directed to the object, double vision ensues.

If we suppose the required lens so broad that the two eyes can look at once each through an eccentric part of it at the object, these parts will have, as regards lateral displacement of the virtual images, nearly the prismatic effect above referred to. Instead of the combination of lens and prism, such eccentric portions of a broad lens have been proposed.

Although the argument for these so-called orthoscopic lenses looks plausible, it must be remembered that they have the defects as regards refraction of the lateral portion of a spherical lens. Zehender objects to them that they give incorrect images. The method may perhaps be adopted in certain cases, but probably only to a limited extent, as on the one hand only weak prisms can be used, and the orthoscopic prism, even for glass of 17 inches focus, is one of 8 degrees; and on the other

hand, the objection to the usual method, the supposed want of harmony between the accommodation and the convergence, is valid only to a certain degree.

If we suppose the glasses to be used according to the first of these methods, the usual one, then the centres of the glasses should be each on a straight line between the object and the centre of the eye, and the glass should be nearly perpendicular to this line. The distance of the centres of the eyes from each other being about $2\frac{1}{2}$ inches, if each glass were one inch in front of the centre of the eye, and the object 15 inches off, then the distance apart of the centres of the glasses should be to $2\frac{1}{2}$ inches as 14 is to 15, that is $2\frac{1}{2}$ inches. The inclination of the glasses to each other would be about 9 degrees. According as the bridge of the nose were more or less prominent, a differently shaped frame is required to place the centres of the glasses so as to be opposite the pupils.

Corrigend.—Page 284, first column, instead of "(Continued from page 166)" read (Continued from page 249).

Second column, line 13, instead of the word "used," read *worn as spectacles*.

LAWS OF THE STATE REGULATING ADMISSION TO THE MASSACHUSETTS MEDICAL SOCIETY.

At a meeting of the Councillors of the Massachusetts Medical Society, held in Boston, October 5th, 1870, the Committee, to whom was referred the Report of the Delegates to the American Medical Association, and other papers, made a Report; and that portion of their Report which related to the Laws of the State regulating the admission of members into the Society was referred to the Standing Committee on Publications, with instructions to publish as much thereof as appeared to them of general interest. The following extracts are therefore sent to the Boston Medical and Surgical Journal for publication:—

In the year 1781, the Legislature of the Commonwealth of Massachusetts passed an Act that certain persons therein named "be, and they hereby are formed into, constituted and made a body politic and corporate by the name of the Massachusetts Medical Society; and that they and their successors, and other persons as shall be elected in the manner therein mentioned, shall

be and continue a body politic and corporate by the same name forever." (Special Laws of 1781, chapter 15.)

In this Act certain privileges are granted to the Fellows of said Society, and certain duties enjoined upon them, the neglect of which was punishable by severe penalties.

It was enacted (sect. 5th) "that the Fellows of said Society may, from time to time, elect such persons to be Fellows thereof as they shall judge proper; and that they, the Fellows of said Society, shall have power to suspend, expel, or disfranchise any Fellows of said Society."

It was also enacted (sect. 6th) "that the number of said Society who are inhabitants of this Commonwealth shall not at any one time be more than seventy (70), nor less than ten (10). And then, as if to imbue the Society with a congenital hatred of quackery, there occurs in italics this remarkable preamble to the seventh section of said Act. "Whereas it is clearly of importance that a just discrimination should be made between such as are duly educated and properly qualified for the duties of their profession, and those who may ignorantly and wickedly administer medicine, whereby the health and lives of many valuable individuals may be endangered, or, perhaps, lost to the community;—Be it, therefore, enacted (sect. 7th) that the President and Fellows of said Society, or such other of their Officers or Fellows as they shall appoint, shall have full power and authority to examine all candidates for the practice of Physic and Surgery (who shall offer themselves for examination) respecting their skill in their profession; and if, upon such examination, the said candidates shall be found skilled in their profession, and fitted for practice of it, they shall receive the approbation of the Society, in letters testimonial of such examination, under the seal of the said Society, signed by the President, or such other person or persons as shall be appointed for that purpose." It was also enacted (sect. 8) "that if the President, or such other person or persons, so elected or appointed for the purpose of examining candidates as aforesaid, shall obstinately refuse to examine any candidate so offering himself for examination as aforesaid, each and every such person so elected and appointed as aforesaid, shall be subject to a fine of one hundred pounds to be recovered by the said candidate."

In an Act passed Feb. 10, 1789 (Special Acts of 1788, chap. 49), it was enacted "that it shall be the duty of the said Massachusetts Medical Society, in order more

effectually to answer the designs of their institution, from time to time to describe and point out such a medical instruction, or education, as they shall judge requisite for candidates for the practice of Physic and Surgery, previous to their examination before them, or their officers appointed for said purpose, respecting their skill in their profession, and shall cause the same to be published in three newspapers in three different counties within this Commonwealth."

In an Act passed March 8, 1803 (Special Acts of 1802-3, chap. 123), two special elections were provided for; one for the election, before the next annual meeting, of "such and so many suitable persons, being physicians or surgeons resident within this Commonwealth, as they shall see fit," into that corporation and to be Fellows thereof; and another at the annual meeting, of "so many Councillors as the said Society shall, from time to time, judge necessary and expedient;" and, also, that at their first meeting afterwards the Councillors shall appoint "five Examiners, or Censors, for examination of all the persons," &c. This is the first enactment directing the appointment of Censors: their election has since been given to the District Societies, but their powers and liabilities have remained essentially the same. It was also enacted (sect. 3, Acts of 1802-3) "that the said Councillors, at any of the three stated meetings of the same, and only at these meetings, and after three months nomination of every candidate, and not otherwise, by a major vote of those present, may elect any suitable person or persons to be a Fellow or Fellows of said Society; and all persons, if not practising physicians or surgeons, or not resident within this Commonwealth, who shall be so elected, may be deemed honorary members." It was further enacted (sect. 4, Acts of 1802), "that every candidate who, upon examination, shall be approved by a majority of said Examiners or Censors, shall be entitled to letters testimonial of their approbation and of their license to such candidate to become a practitioner of medicine or surgery under the hands of the Examiners consenting thereto; and to such letters testimonial the seal of the said Corporation shall be affixed by the president or secretary, if any there shall be, with the signature of the same." "And every person who shall receive the said letters testimonial, and such also as hereafter may be admitted to the degree of Bachelor (Doctor, subsequently substituted for Bachelor, by the University) of Medicine at Harvard

University, shall be entitled to the use of the libraries of the Society, under such restrictions as the Councillors may direct, and after three years of approved practice in medicine and surgery, and being of good moral character, and not otherwise, shall, upon application, and subscribing to the By-Laws, as aforesaid, be admitted a member of said Corporation, while a resident practitioner of medicine or surgery within this Commonwealth."

In 1817, and in 1818, general laws were passed compelling the Fellows of the Massachusetts Medical Society to examine candidates for license to practise Physic and Surgery, and outlawing all accounts for the practice of Physic and Surgery made by those who were not graduates of some Medical school or College, or licentiates of the Massachusetts Medical Society.

In March, 1831 (Acts of 1830, chap. 146) the Legislature so amended the Act of March 8, 1803, as to compel the Society to receive as members, upon application, all graduates of Harvard University, and its own licentiates, being of good moral character, and not otherwise, without three years approved practice.

In 1836, years before the existence of the American Medical Association, the Revised Statutes (Rev. Stat. chap. 22) specially repealed the general Acts of 1817 and 1818, and enacted provisions in relation to the examining of candidates, requiring all to be examined who, residing within the State, offered themselves to be approved as practising physicians and surgeons; and raised the fine, for unreasonably refusing to examine the same, to four hundred dollars.

In 1859, March 5th, the Legislature passed the following Act (Acts of 1859, chap. 82):—

"Secr. 1st. No person shall hereafter become a member of the Massachusetts Medical Society except upon examination by the Censors of said Society, and any person of good moral character found to possess the qualifications prescribed by the rules and regulations of said Society shall be admitted a Fellow of said Society."

"Secr. 2d. This Act shall take effect from and after its passage."

The General Statutes came in force May 31, 1860, and repealed the Revised Statutes (see General Statutes, chap. 182), but did not repeal any of the Special Acts passed in relation to the Massachusetts Medical Society or in addition to its Act of Incorporation. This Statute of 1859 is the last addition to the special laws in relation to the Massachusetts Medical Soci-

ety, and repeals by implication all previous Laws which may conflict with it. All admissions to membership in the Society must be made in conformity to this Law. It is a Law of the State, and the Society must comply with its requisitions, until it is altered or repealed by the Legislature of the State.

In a word, then, the whole matter of admission is with the Censors, who must at all times conform to the Laws of the State, from which the Board derives its existence and its authority.

In accordance with the Law of the State of 1859, and votes of the Society passed previously, Dr. Alley (then Secretary of the Society), by direction of the "Government of the Massachusetts Medical Society," issued a circular, dated April 8th, 1861, to the Censors, reminding them that "all candidates must be examined by a Board of Censors."

The only method of expulsion of a member provided in the By-Laws of the Society is through the agency of a Board of Trial, which, under penalty for neglect or refusal, must hear and decide upon every case properly brought before it. No instance has been found of neglect of the Board to do its duty.

At the meeting of the Councillors, Oct. 5th, on motion of Prof. H. J. Bigelow, of Harvard University, seconded by Prof. C. Ellis, Dean of the Faculty, it was voted, *nem. con.*, to strike out a paragraph, relating to the admission of Medical Graduates of Harvard University, from Art. I. of the By-Laws of the Society—it having been originally founded on the old State Law, which was modified by the Revised Statutes in 1836, and repealed by an Act of 1859, and therefore invalid and obsolescent from that time, though left inadvertently upon the books.

Reports of Medical Societies.

VERMONT MEDICAL SOCIETY. REPORTED BY THE SECRETARY, L. C. BUTLER, M.D.

The fifty-seventh annual session of this Society was held at Montpelier, Oct. 19th and 20th, 1870. Dr. Henry Janes, of Waterbury, President, in the chair; Dr. L. C. Butler, of Essex, Secretary. The proceedings of the semi-annual session at Burlington having been read by the Secretary, the Society proceeded to the transaction of business.

Dr. S. Putnam, of Montpelier, presented the report of the Delegates to the Medical Department U.V.M. at Burlington, which was accepted.

Dr. C. P. Frost, of Brattleboro', moved to strike out the last paragraph of standing resolution No. 2, of the Society, relating to forfeiture of membership in the Society, which was unanimously adopted. Under this arrangement the names of Drs. G. M. Hall, of Swanton, M. C. Edmunds, of Weston, E. V. Watkins, of Newbury, H. H. Niles, of Thetford, and H. Fales, of Waterbury, were presented for membership, and were duly elected.

The credentials of Dr. Arthur S. Wolff, delegate from the Medical Society of New York, were presented, and he was cordially received by the President, and invited to participate in the deliberations of the Society. Dr. Wolff responded, expressing the congratulations of the Society he represented.

Chloral Hydrat.—Dr. J. N. Stiles, of Windsor, presented a paper on Chloral Hydrat, giving some practical results of its use in his practice, and under his observation and that of others.

An interesting discussion followed, in which Drs. Wolff, Stiles, Frost, Watkins, Janes, Putnam, Richardson, and others, participated, giving results of their experience in its administration in various diseases.

Dr. Wolf was not favorably impressed with its use in his practice. Dr. Watkins had used it in *delirium tremens* with controlling effect. Dr. Janes had noticed prolonged soporific effect from its administration in the ordinary dose, in one instance requiring three days to recover from it. Dr. Putnam had administered it in *puerperal convulsions* with some success, but had seen no hyperæsthesia resulting from it. Dr. Frost thought the profession would find in this remedy a very good hypnotic, which may take the place of opium and other drugs of that nature. Dr. Richardson inquired in relation to its use in *hysteria*. Drs. Watkins and Janes had used it in that disease with good effect. Dr. Richardson thought the condition of the system had much to do with its effect, correcting irregularities, sometimes changing and increasing its operation. He had used it in *hysteria* and in general nervous derangements, and in doses of ten grains each. The general opinion of those who had prescribed the remedy was that ten to fifteen grain doses were sufficient, though much larger and much smaller had been prescribed, as

in one instance a hundred grains and in another one grain.

In the afternoon a resolution was introduced by Dr. L. C. Butler, inviting county Medical Societies to a more intimate relation with the State Society, by making their organizations auxiliary to it; sending valuable papers presented at their meetings, to the State Society to be published in its transactions, and by contributing of their funds to sustain the State Society. Adopted.

The names of Drs. H. J. Miller, of Sheldon, and George C. Briggs, of Franklin, were presented for membership, and they were duly elected.

Dr. C. P. Frost presented an elaborate paper on Insanity, considering it in its pathological, diagnostic and therapeutical aspects.

Dr. S. Putnam, of Montpelier, also read a paper on the same subject, considering it in its statistical aspects, showing its rapid increase in the present day, and in its legal aspects showing the tendency to make the plea of insanity an excuse and palliation for crime. At 4, P.M., the President's address was delivered, and was upon the subject of *Imaginary Diseases and Imaginary Remedies*, which he illustrated by numerous cases occurring in his own practice and under the observation of others.

During the evening session Vice President Abram Harding, of Grand Isle, occupied the chair.

Dr. C. P. Frost, from the Board of Councillors, recommended the following persons to become members of the Society: Drs. D. E. Wells and Charles Gaylord, of Hardwick, Chas. Cole, of West Haven, H. S. Calderwood, of Moretown, and George Spafford, of Windham, and they were duly elected.

Dr. Frost also announced the decease of Drs. C. M. Rublee, Daniel Bates, and M. J. Love, and the appointment of Drs. J. E. Macomber and B. F. Morgan to prepare obituary notices of Drs. Rublee and Love.

The Board of Councillors also nominated the following persons for election as honorary members of the Society: Drs. A. S. Wolff, of New York, Albert Smith, of New Hampshire, and J. H. Baxter, of Washington, D. C.

Dr. Frost presented the name of Dr. B. F. Morgan, of Bennington, for Commissioner of the Insane, and he was unanimously recommended by the Society to the Legislature for election to that office.

Typhoid Fever.—The greater portion of the evening was passed in listening to re-

ports in relation to epidemics and other diseases, from all parts of the State. The prevalence of a mild form of *typhoid fever* in nearly every county of the State during the past year was specially noted, sometimes complicated with pneumonia, and occasionally with jaundice. Dr. Hyde, of Caledonia Co., spoke of the prevalence of *scarlatina* in that county, and of the use of carbolic acid in its treatment, as a bath and gargle, and internally in a formula of ten drops of the solution to the ounce of water. Dr. Frost, of Windham county, thought there had been less of ordinary diseases than usual in that county. He raised the inquiry in regard to the true pathology and origin of typhoid fever. Dr. Carpenter, of Chittenden Co., had noticed a difference in the type of disease, between the lake and inland towns. He had not seen a case of typhoid fever in Burlington for thirteen years, but had seen cases in other towns. The type in the city was the congestive. During this season intermittent fever had prevailed as the result of malaria north of the city. We know very little about the cause of fever, or of its pathology.

Dr. G. M. Hall, of Franklin Co., considered typhoid fever as a specific disease, a species of exanthema, self-limited in its duration, and requiring little treatment. In reply to an inquiry, he said, typhoid patients do not have the disease a second time. There may be exceptions to this rule as in all exanthemata, but they are few. In this opinion, Dr. Stiles and Dr. Morgan concurred, while Dr. Emmons, of Hartland, and Dr. Hyde, of Hardwick, had seen several exceptions to the rule, but not cases of marked severity.

During the forenoon of the second day, Dr. S. N. Stiles proposed an amendment to the By-Laws of the Society, relating to the appointment of delegates to Medical Societies and Associations, which was adopted. The names of Drs. Edward S. Peck, of Burlington, R. C. Ward and Wm. H. Platt, of Shoreham, and Harvey Knight, of Georgia, were proposed for membership, and they were duly elected.

Dr. B. F. Morgan read an obituary notice of Dr. M. J. Love, of Bennington.

Dr. Chandler presented the written details of a case of *Intussusception*, in which 36 inches of the intestines were discharged. This case was one of peculiar interest, because it was published in the secular papers of the day as an instance in which a snake had passed through a human being. Dr. Chandler had the satisfaction of seeing

the *varmint*, and describes it as "of a darkish color, lighter on the belly (as they called it), not so flat as one might imagine a tube to be when its walls lay in contact, and looking not entirely unlike what it had been named." The post mortem revealed the cicatricial point in the intestines from whence the snake was taken.

Dr. N. W. Braley presented a resolution appointing a committee of five to confer with the Legislature now in session relative to an appropriation for publishing the transactions of the State Medical Society. The committee was constituted as follows: Drs. Carpenter, Scott, Bartlett, Braley and Butler.

The committee on nomination of officers of the Society for the year ensuing reported as follows, and they were elected:—

President, Dr. S. Putnam, of Montpelier; *Vice President*, Dr. A. J. Hyde, of Hardwick; *Secretary*, Dr. L. C. Butler, of Essex; *Assistant Secretary*, Dr. E. H. Pettin-gill, of Saxton's River; *Treasurer*, Dr. D. G. Kemp, of Montpelier; *Auditor*, Dr. J. N. Stiles, of Windsor; *Committee on Publication*, Drs. L. C. Butler, G. B. Bullard, and O. F. Fassett; *Delegates to U. V. M. Med. Dep't*, Drs. L. C. Butler and N. W. Braley; *to Medical Society of New York*, Drs. C. L. Allen and A. S. Woodward; *to Medical Society of Massachusetts*, Drs. J. N. Stiles and J. S. Richmond; *to Medical Society of Connecticut*, Drs. L. C. Butler and C. P. Frost; *to Medical Society of New Hampshire*, Drs. C. A. Scott and D. E. Wells; *to Medical Society of Maine*, Drs. G. B. Bullard and Chas. Gaylord; *to Medical Society of New Jersey*, Drs. E. F. Upham and H. O. Bartlett; *to Medical Society of Connecticut River Valley*, Drs. M. C. Edmunds and C. A. Sperry; *to American Medical Association*, Drs. A. S. Woodward, Chas. Cole, H. D. Holton, S. W. Thayer, H. Janes, W. R. Hutchinson, N. W. Braley; *Committee on Registration*, Drs. L. C. Butler, O. F. Fassett; *Committee on Epidemics and other Diseases*, one for each County in the State, Geo. C. Briggs, G. B. Bullard, J. E. Cranston, C. M. Chandler, D. T. Blanchard, E. F. Upham, J. N. Stiles, H. D. Holton, B. F. Morgan, C. L. Allen, M. H. Eddy, J. B. Morgan, S. R. Corey, A. Harding.

Dr. S. Putnam presented cases of *Uterine Disease* in his practice, with treatment.

Dr. Miles proposed an amendment to the Constitution of the Society, fixing the time of holding the annual meeting on the second Wednesday of October in each year, which was adopted.

The semi-annual meeting of the Society is to be held at St. Albans, on the first Wednesday and Thursday of June, 1871.

Medical and Surgical Journal.

BOSTON: THURSDAY, NOVEMBER 10, 1870.

PHOTO-MICROGRAPHY.

To no one more than to Dr. Woodward is the medical world indebted for the cultivation of this new and important art. His position at Washington as the Curator of the Medical, Microscopical and Comparative Anatomy Sections of the Army Medical Museum has put him in possession of unlimited material for the most valuable investigations, material which he has utilized in a most praiseworthy manner. As is well known, the labors of Dr. Woodward have received the highest encomia from scientific men at home and abroad, and his memoirs have been copied liberally into the journal articles and the works of European authors.

Dr. Woodward has once more laid the profession under an obligation by presenting them a monograph on Certain Points connected with the Histology of Minute Bloodvessels, a report made to the Surgeon General U.S.A., and issued from his office. The work is accompanied by a series of eleven very valuable and interesting photo-micrographs. The monograph is well worthy a careful perusal; we have only space, however, to quote portions of it.

"Having recently been occupied in the critical examination of certain preparations, in the Microscopical Section of the Museum, illustrative of the minute anatomy of the bloodvessels, I have thought that some of them threw so much light on certain points involved in the recent discussions with regard to the doctrine of inflammation, that a short account of them would be of interest, and might perhaps do good service, in connection with the appreciation of the conflicting statements which have appeared in the medical journals since the publication of the paper of Dr. J. Cohnheim on inflammation and suppuration.

"Perhaps the observations of Cohnheim must fairly be regarded as elaborations of the previous experiments of Dr. Augustus

Waller, but certainly they produced an impression upon the medical world far beyond that made by the papers in the *Philosophical Magazine*, and more or less complete accounts of the conclusions arrived at by the distinguished Berlin observer have continued to appear, from time to time, in both foreign and American medical journals, ever since the publication of his paper in 1867.

"Recently protests against these conclusions have appeared in various quarters, among which particular reference may be made to the paper of Prof. Koloman Balogh, of Pesth, published in 1869, and that of Dr. V. Feltz, of Strasbourg, in 1870. Both of these authors have failed to see the white blood corpuscles pass through the coats of the small vessels in the manner described by Cohnheim, and deny the existence of stomata between the cells of the vascular epithelium, large enough to permit such a wandering to occur."

Desiring to investigate the subject thoroughly, Dr. Woodward made careful experiments, which led him to believe that Cohnheim was a most conscientious observer, who had described as faithfully as possible the impressions made upon him. The results he obtained, he found, could be described in the very language of Cohnheim, without drawing upon the imagination.

"Most of the preparations here referred to are examples of the results attainable by staining the tissues with a dilute solution of the nitrate of silver. This reagent has been employed for various histological purposes during the last ten years, and has attracted attention especially in connection with the cornea, the various forms of connective tissue, the ultimate branches of the lymphatics and the boundaries of the cells which constitute epithelial surfaces."

"If a dilute solution of nitrate of silver is brushed over a clean epithelial surface taken from a recently killed animal, and the tissue after washing with distilled water is exposed for a short time to the action of sunlight, it will be found on microscopical examination that a brownish black precipitate of silver has been produced at the boundaries of the epithelial cells, while the cells themselves are comparatively but little stained, or if the manipulation has been carefully conducted, are not stained at all. For this purpose I have most frequently employed, at the Museum, a solution made by dissolving one part of crystallized nitrate of silver in four hundred parts of dis-

tilled water, but considerable variation on either side of this strength does not much modify the result, provided the solution is well washed off before the tissue is exposed to the light.

"If the same solution is injected into the bloodvessels, the lining epithelium is handsomely mapped out in all those membranous and superficial parts in which a ready exposure to the action of light is practicable, and although in the parenchymatous organs, such as the liver, the spleen, the kidneys, &c., the juices of the tissues are apt to interfere with the reaction, yet even here occasional success may be attained. In practice it is often found advantageous to combine the silver solution, intended for injection, with a certain amount of gelatine, by which the bloodvessels are kept handsomely distended and the beauty of the preparation is much increased."

In addition to the nitrate of silver process, many of the specimens are tinged with carmine, as described by Thiersch in his work on epithelial cancer.

Dr. Woodward's own description of some of the photo-micrographs must serve as a sample of the whole series.

* "1. Photograph representing several venous radicles uniting to form a small vein, in the muscular coat of the urinary bladder of the frog. From preparation No. 3378, Microscopical Section. Magnified 400 diameters by Wales's one eighth objective, illuminated by the Magnesium lamp.

"The principal venous trunk represented in this photograph is 1-400th of an inch in diameter. It is formed by the union of three smaller radicles, of which that on the left hand is much out of focus. Another smaller radicle, also much out of focus, joins the trunk on the left, near the bottom of the picture. The walls of the venous trunk, and of those of its branches which are in focus, are plainly seen to be formed of somewhat irregular epithelial cells, which vary in shape and size, averaging 1-500th of an inch in length and 1-2200th in breadth. The boundary of each cell is indicated by a zigzag black line. In each of the cells which is accurately in focus, a smooth, oval nucleus, 1-2800th of an inch in length, is visible. In examining the original preparation, by changes in the fine adjustment of the microscope, similar nuclei can be seen in each of the epithelial cells. These nuclei, being brilliantly stained with carmine, contrast sharply with the black cell-boundaries resulting from the silver imbibition. By a still further altera-

tion of the fine adjustment, the cells and nuclei of the opposite side of the vein are brought into view."

"III. Photograph representing the stomata between the epithelial cells of a vein 1-50th of an inch in diameter in the mesentery of the frog. From preparation No. 3276, Microscopical Section. Magnified 400 diameters by Wales's one-eighth objective.

"Owing to the curved form of the vein, but a small portion of its surface is in focus. In this portion the silver-stained boundaries of several of the epithelial cells of the vein are visible, and display in their course certain remarkable forms, which may be compared to the Wormian bones of the cranial sutures. These are the so-called stomata. They are irregularly rounded in form, and vary from the 1-10000th to the 1-4000 of an inch in long diameter. These shown in the photograph present a clear central space, bounded by a sharp, black outline, which is sometimes even thicker than the boundaries of the cells themselves. The nuclei of the epithelial cells are not shown. * * * * *

"Having arrived at this conclusion with regard to the general interpretation of the action of silver on epithelial surfaces, the true meaning of the so-called stomata next demands consideration. They are to be observed most abundantly, as may be inferred from the photographs described, in veins of moderate size. I have found them largest and most numerous in veins 1-50th of an inch in diameter, or even larger, and they become smaller and rarer in smaller branches. They are comparatively infrequent in the capillaries and still more so in the small arteries; the Museum however possesses preparations showing them in both. I have moreover concluded from my own observations that in number and size they vary in vessels of the same dimensions in different parts of the body. Thus, for example, in the veins of the mesentery of the frog they are larger and more abundant than in veins of the like dimensions in the urinary bladder of the same animal.

"In figure they are rounded, oval, or oblong. I have measured them as large as 1-4000th of an inch in diameter, but smaller ones 1-5000th to 1-6000th of an inch are more common, and the smallest and most frequent do not exceed 1-10000th of an inch. Sometimes they present clear centres sharply mapped out by black boundaries, sometimes forms of the same size and character are opaque and black throughout, and this has been interpreted as due to variations in the composition of the fluid by

which the opening is occupied, which sometimes precipitates the silver solution, while at other times it does not, and the action is limited to the solid margins of the pore. They are almost invariably found in the marginal line between adjacent epithelial cells, and the rare cases in which I have observed them apparently in the cells themselves, are probably to be explained by the adjacent margins having from some cause escaped the influence of the silver salt. From my study of these peculiar inter-cellular forms, I am inclined to regard with favor the opinion that they are actual openings in the epithelial layer."

"It has been urged, however, by Balogh, that even if the stomata described in the vascular epithelium are admitted as such they are not large enough to permit the passage of the white blood corpuscles which, as is well known, average about 1-3000th of an inch in diameter. But even if we discard the supposition that the pores may be stretched open and made larger by the distended condition of the vessels of inflamed parts, there appears to me no difficulty in understanding how a white corpuscle might pass through the smallest of the stomata I have described. An opening 1-10000th of an inch in diameter is only a little less than one-third the average diameter of the white corpuscles, and any one who has seen the extraordinary modifications of form which these little masses of protoplasm undergo in the course of their so-called 'amoeboid movements,' would readily credit their capability of passing through such apertures. As the amoeboid movement does not occur in the white corpuscles while rolled along in the torrent of the circulation, but only when the movement of the blood is arrested more or less completely, the fact that large numbers of white corpuscles do not habitually pass through the vascular walls into the tissues will not militate against the notion of patulous orifices. That a passage of the white blood corpuscles through the vascular walls does actually occur, is shown by the next picture.

"XI. Photograph representing white corpuscles in various phases of the amoeboid movement, in the external coat of a small vein of the muscular coat of the stomach of a mare. From preparation No. 3382, Microscopical Section. Magnified 400 diameters by Wales's one-eighth objective.

"This preparation is one of a number of sections made from the stomach of a mare dead of gastro-enteritis. In these sections, which are stained with carmine and mount-

ed in Canada balsam after the method described in the early portion of this paper, it was found that many of the small veins of the sub-peritoneal connective tissue and of the muscular coat were surrounded by white corpuscles fixed in all stages of the amoeboid movement. In a number of places where the sections pass transversely through the veins, the white corpuscles can be observed in the interior of the vein, and in the vascular walls as well as in the adjacent tissue. The series of preparations gives a satisfactory demonstration of the wandering of the white corpuscles."

"It will be seen from the foregoing details that, so far as the structure of the vascular walls and the passage of the white corpuscles through them are concerned, the facts appear to be on the side of Cohnheim. How then with regard to the doctrine of inflammation which he builds upon these facts and upon his corneal studies? Does the creeping out of the white corpuscles constitute the essence of the inflammatory process? Do these little moveable masses of living protoplasm furnish the germs for the elements of new formations? Have pus corpuscles no other origin? Are the processes which go on in the cells of the inflamed tissue purely passive, mere phenomena of retrograde metamorphosis?

"I find the evidence insufficient as yet to afford satisfactory answers to such questions. The observations made by Cohnheim on the connective tissue corpuscles of the tongue of the frog are not conclusive in themselves, and Stricker's studies on the same subject show the necessity of further labor in this direction before the possible multiplication of these elements in inflammation can be denied. As to the doctrine that the white corpuscles, after their escape from the bloodvessels, are transformed into the elements of normal or pathological tissues, the facts hitherto brought forward can scarcely be said to do more than raise it to the rank of an ingenious hypothesis. The actual steps of this transformation, if it does occur, have yet to be observed."

We are glad to learn, from another source, that Dr. Woodward is prepared to furnish, at reasonable prices, fac similes of the photo-micrographic slides of the tissues he has succeeded in perfecting with so much care and skill. He now offers an aggregate of sixty lantern slides from specimens representing the anatomy of bloodvessels and blood corpuscles, miscellaneous tissue preparations and diatoms and other test

objects. They can be thrown upon a screen placed before a class, and, in this manner, the most valuable investigations in histology can be displayed to a large audience at once.

The possession of such a collection—and we trust it will be largely increased—will prove a very valuable adjunct to the armamentarium of our professors in the medical schools.

OBITUARY NOTICE OF HON. APPLETON HOWE, M.D.

By EBERNEZER ALDEN, M.D., Randolph.

APPLETON HOWE, M.D., of South Weymouth, Mass., died of apoplexy, Oct. 10th, 1870, aged 78.

He was the son of Rev. Nathaniel and Mrs. Olive (Jones) Howe, and was born in Hopkinton, Mass., Nov. 26, 1792. He graduated at Harvard College in 1815, and received the degree of Doctor in Medicine at the same institution in 1819. After leaving college, he was appointed assistant in Phillips Academy, Andover, where he officiated one year under the celebrated principal, Mr. John Adams. He then pursued his medical studies three years, as a private pupil of Dr. John C. Warren, at the same time attending the regular courses of lectures at the Medical College. When examined for his medical degree, he read and defended a thesis on bloodletting. He was admitted a Fellow of the Massachusetts Medical Society in 1823. He was one of the founders of the Norfolk District Medical Society in 1850, and its presiding officer for three years—from 1854 to 1856 inclusive.

In 1819 he was invited and settled as a physician in South Weymouth, Ms., where he was engaged in the faithful performance of the duties of his profession for more than half a century. In 1821 he married Harriet, daughter of Eliphalet Loud, Esq., who died without issue in 1848. In 1850 he was united in marriage to Eliza, daughter of Capt. Joseph Loud, by whom he had two children. The widow and a daughter survive to mourn his loss. Between the years 1822 and 1840, he held office in the militia of the State, and attained the rank of Major General of Division. He represented his district in the Senate of Massachusetts in the years 1840 and 1841.

Dr. Howe was decided in his convictions and opinions. That which was true and right commanded his prompt and earnest

attention. Falsehood, duplicity and hypocrisy in all their forms he neither practised nor tolerated. In his profession, he was neither a timid nor a rash practitioner; not afraid to bleed or to give calomel in full doses when the condition of his patient required it. Dr. Howe sympathized with the sick. In their afflictions he was afflicted, and was ready to respond to their calls at all hours—to those of the poor as well as of such as could make compensation for his services. He was a wise and safe counsellor; not only as a physician, but as a friend. The community where he resided appreciated his character and honored him and themselves by the most implicit confidence.

In his intercourse with his medical brethren he was courteous, considerate of their feelings and reputation, and equally ready to receive, as to impart counsel. He was universally respected, and performed the duties of every trust committed to him—and they were many—with the most scrupulous fidelity.

Dr. Howe was equally decided in his views of religious truth as on other subjects. He held to the great facts and principles of divine revelation with a tenacious grasp. He was a liberal supporter of public worship, which he punctually attended unless prevented by the calls of duty. Yet from a strange self-distrust he never publicly united with the christian church. Towards the close of his last sickness, the cloud which had so long obscured his vision was taken up. He saw clearly, and no longer through a glass darkly; and he was enabled to say, "I trust only in Christ. How precious is he to me at this hour."

For several years before his death, he had premonitions of disease in the chest, and probably of the heart; often obstructing the circulation, producing severe paroxysms of difficult respiration; sometimes dropsical effusion, and finally culminating in apoplexy, with convulsions, which soon terminated his valuable life.

In his social character, Dr. Howe will be long remembered, as a warm and generous friend, an affectionate husband, a kind and indulgent parent, and good citizen.

For some years he had in a great measure relinquished the arduous duties of his profession to his able associate and successor, the man of his choice, with whom his relations were most intimate and agreeable.

He is gone, too soon for his friends and the world, if not for himself. His life was a benediction, and his end was peace.

THE INTRODUCTORY EXERCISES BEFORE THE MEDICAL CLASS.—The winter course of lectures in the eighty-eighth session of the Medical Department of Harvard University was inaugurated on Wednesday, the 2d inst., by the usual introductory exercises. After a prayer by the Chaplain of the University, Rev. Dr. Peabody, an address was delivered by Prof. White, which was listened to with marked attention by a large audience of physicians and students. We have already, in the last number of the JOURNAL, given our patrons an opportunity to read the address in full.

CASE OF NASO-PHARYNGEAL POLYPUS; OPERATION BY REMOVAL OF THE SUPERIOR MAXILLARY BONE.—M. Verneuil related a case of removal of a naso-pharyngeal polypus before the Société Impériale de Chirurgie, which excited some discussion before that body, which we extract from the *Gazette Hebdomadaire* of August 19th.

A child, 16 years of age, of a good constitution, entered the Hôpital Lariboisière on the 16th of June. In the month of October, 1869, the disease first showed itself by a slight difficulty of respiration, with occlusions of the left nasal fossa and epistaxis. In December, the left cheek became swollen, and hearing disappeared on that side.

On her admission to the hospital, there was noticed a tumor on the left cheek, the size of a turkey's egg, firm, slightly movable, not adherent to the skin. The left nasal fossa was closed by the tumor. The velum palati was depressed. Exophthalmos was commencing on the left side. Snoring respiration, only, by the mouth; complete deafness on the left side. Deglutition somewhat difficult. No pain. Vision perfect. A naso-pharyngeal polypus of considerable size existed on the left side, springing from the base of the cranium, filling the pharynx and sending prolongations into the nasal passage, the maxillary sinus, the orbit and the pterygo-maxillary fossa.

Operation, the 29th of June. The patient was chloroformed. The superior maxilla was removed rapidly and without hæmorrhage into the mouth. A polypus

was found, having a network of vessels, which poured out blood freely. The pedicle was about three centimetres in diameter, attached high up in the pharynx, so that it was reached with difficulty. M. Verneuil removed the polypus in portions. The blood collected in the mouth. Forceps were applied to the pedicle, but the blood nevertheless did not cease. The patient was removed to bed, when syncope supervened. The blood was drawn out from the air passages, and air admitted. The child began to cry, when the hæmorrhage, which had been arrested by the syncope, recurred. The same means for resuscitation were attempted, but the patient succumbed, in spite of efforts for resuscitation. M. Verneuil thought that the erect position, which he had adopted, with a view to arresting the hæmorrhage, had been the cause of death, and not the action of the chloroform. M. Le Fort considered that the chloroform had predisposed the patient to syncope, and had been to a great extent the cause of death. MM. See and Liégeois expressed the opinion that the death ought to be attributed to asphyxia by the penetration of blood into the air passages. M. Forget coincided with this opinion, and called attention to the fact that the recurrence of the symptoms at every fresh entry of blood into the air passages, and the momentary resuscitation on the removal of the blood and the admission of the air, showed that asphyxia and not syncope was the cause of death.

The *Edinburgh Medical Journal* of September, 1870, has an article by Dr. Charles Kidd upon the "Medico-legal bearings" of chloroform. Having in previous writings advocated its employment in surgery, the object of this paper is to show that "sensational novelists, jurymen," &c., misapprehend the nature of chloroform, and further to inquire what are the weak points associated with its fatal effects.

He does not agree with Dr. Richardson that "the right side of the heart is the chief weak point," for, as a rule, of nearly 400 accidents now collecting from chloroform the patients were in rude health. "Blood coagulates," says Richardson, "because it does coagulate; that is the amount of our knowledge: chloroform kills because it does kill."

In regard to deaths which may have been accidental and improperly ascribed to chloroform, he remarks that "the distinction is perhaps too fine for juries, but might benefit a surgeon, or save the character of chloroform itself."

Referring to the death of Dr. Toynbee, which had been unjustly attributed to suicide, he says that "his body presented the appearance of one who had died while inhaling chloroform." His notes at the side of his couch showed that he had been studying its effects on the Eustachian tube.

"The body was like that of the son of one of the surgeons at our chief Hospital, who also died while inhaling chloroform for tic douloureux."

Finally, Dr. Kidd goes on to say that "the details of this case given at the time with the equally exact appearances of six other cases of coroner's inquest, of a like kind, have led me to conclude that much is to be learned and much corrected."

THE INTESTINES AND ABDOMINAL VISCERA CUT THROUGH BY THE PASSAGE OF A RAILWAY TRAIN OVER THE BODY WITH SCARCELY ANY INJURY TO THE ABDOMINAL WALLS.—R. A., æt. 19, was found lying on his back, just inside Euston Station, straight across the outer rail, with his head between the rails, and his hat tilted over his eyes. He was alive when found, but dead in a few minutes. The body was at once brought to University College Hospital. It was clothed in a long jacket, waistcoat and trousers of thick, coarse cloth, on which the marks of the carriage-wheels were plainly visible. Only a few pence were found in his pockets. There was not the smallest wound on the body, and only a few abrasions of cuticle across the abdomen. After some hours, pretty extensive ecchymoses appeared. On opening the abdomen, all the abdominal muscles were found completely cut through, horizontally, retracted, and curled up, leaving a gap five or six inches wide. The back muscles were in the same condition. The right kidney was cut in half. The transverse colon and a large piece of the ileum were lying free in the abdomen; and the body of the third lumbar vertebra was crushed literally to powder; everything was divided except the skin. The rest of the body was healthy.—*British Med. Journal*, Aug. 20th, 1870.

DR. DANIEL E. DODGE now has charge of the New York State Inebriate Asylum.

Medical Miscellany.

CONVOLULIN AND JALAPIN AS PURGATIVES.—Drs. Köhler and Zwick published an essay in *Neues Jahrb. f. Pharmacie* on this subject, the following being their conclusions:—

1. That the purgative action of these substances depends on the presence of bile in the bowels, with which they may mix and be dissolved. Whilst 0.8 grm. caused death administered to a guinea-pig, by producing enteritis, as much as 1 to 2 grms. could be given without effect when the ductus choledochus had previously been tied.

2. The drastic effect is due wholly to local irritation of the mucous membrane. They injected subcutaneously and into a vein as much as 0.5 to 1.5 grm. without any effect.—*N. Y. Med. Record.*

CARBOLIC ACID INTERNALLY IN SYPHILIS.—In the *Arch. f. Dirmat. und Syph.*, Dr. M. Kohn reports the results obtained by Prof. Hebra. The acid was generally given in pill, and was used only in the exanthematous forms of the disease with any apparent success. These, however, improved or disappeared under the use of the remedy in four to seven weeks. Hebra cannot recommend this agent, since mercurials act much more quickly; and the carbohc acid is quite ineffectual against the nocturnal pains and affections of bones and joints.—*Ibid.*

CAUSE OF GONORRHEA.—Prof. W. A. Hammond, of New York, in his "Lectures on Venereal Diseases," asserts his belief, which he supports by cases, that gonorrhoea may be introduced either by the virus of hard chancre, or by the virus of soft chancre, when the chancrous matter has been deposited for a certain length of time upon the mucous surface, without any abrasion being present, or without any chancre following. Vaginitis and urethritis may be induced by other causes, but true gonorrhoea owes its origin to the contagion of chancrous pus alone. He also believes that the gonorrhoea induced by the matter of a hard chancre will be followed by and may impart constitutional syphilis, just as if a chancre had been present. Dr. Hammond's opinions in this respect coincide with those of Hunter. The experiment of Ricord appeared to have finally decided the question that gonorrhoea was incapable of producing syphilis, and that they were totally different disorders. But the conclusions arrived at by Dr. Hammond are:

"1st. That the virus of an infecting chancre, when deposited on a secreting mucous surface upon which there is no solution of continuity, may give rise to gonorrhoea unattended by chancre, but which is syphilitic in its character, and capable of producing constitutional disease.

"2d. The matter of such a gonorrhoea is capable of causing an infecting chancre, either by natural or artificial inoculation, which chancre is followed by constitutional syphilis."

Similar propositions are made about soft sores.—*Med. and Surgical Reporter.*

MASSACHUSETTS GENERAL HOSPITAL.—Dr. J. C. White has resigned the place of Visiting Physician, and been appointed Physician to patients with Diseases of the Skin.

GERMAN surgeons complain of the ill-timed zeal of some missionaries who visit all the hospitals and distribute tracts among the wounded, pointing to their probable death, and calling on them to repent their sins. They say it is immeminently necessary to keep the wounded in good spirits, if a speedy cure is to be brought about. Orders have been given in consequence not to admit such injudicious persons to the sick rooms.—*Exchange.*

CORRECTIONS.—In the JOURNAL for Nov. 3d, p. 295' first column, 2d line from foot, for "those other" read *the older*; second column, 8th line from foot, italicise the word "see"; next line, for "as" read *so*; p. 300, second column, 5th line from foot, for "Friday" read *Saturday*.

TO CORRESPONDENTS.—Communication accepted:—Iodide of Potassium in Asthma.

BOOKS AND PAMPHLETS RECEIVED.—The Pathology and Treatment of Venereal Diseases; including the Results of recent Investigations on the Subject. By Freeman J. Bumstead, M.D., New York. Third Edition, revised and enlarged. With Illustrations. Philadelphia: Henry C. Lea. Pp. 704. (From A. Williams & Co., Boston.)—Twenty-second Annual Report of the New England Female Medical College, Boston. Pp. 24.—Physical Degeneracy. By Nathan Allen, M.D., Lowell, Mass. Pp. 40.

MARRIED.—In this city, Nov. 1st, Dr. Frank W. Draper to Miss Fanny V. Jones, both of Boston.

Deaths in seventeen Cities and Towns of Massachusetts for the week ending Nov. 5, 1870.

Cities and towns.	Total.	Prevalent Diseases.	Typhoid Fever.
Boston . . .	117	22	5
Charlestown 12		1	1
Worcester . .	8	0	0
Lowell . . .	18	3	1
Milford . . .	1	0	1
Chelsea . . .	7	3	2
Cambridge .	14	3	0
Salem	4	0	0
Lawrence . .	5	0	0
Springfield .	5	0	1
Lynn	9	2	2
Fitchburg . .	5	2	2
Taunton . . .	11	2	1
Newburyport	4	1	0
Fall River . .	7	2	0
Haverhill . .	3	0	1
Holyoke . . .	6	1	1
	236	42	21

From all the above-named places there are reported 17 deaths from pneumonia, 13 from croup and diphtheria, 9 from dysentery and diarrhoea, 7 from cholera infantum, and from whooping cough. Holyoke reports two deaths from smallpox since Oct. 22.

GEORGE DENNY, M.D.,

Secretary of State Board of Health.

DEATHS IN BOSTON for the week ending Saturday, Nov. 5th, 117. Males, 53; females, 64. Disease of the bladder, 1—inflammation of bowels, 1—congestion of the brain, 3—inflammation of the brain, 3—disease of the brain, 3—bronchitis, 4—consumption, 22—convulsions, 3—cancer, 2—canker, 1—croup, 3—cholera infantum, 3—debility, 3—diarrhoea, 5—diphtheria, 2—dropsy, 1—do. of the brain, 3—erysipelas, 1—scarlet fever, 1—typhoid fever, 8—homicide, 1—disease of heart, 1—infantile disease, 1—disease of the kidneys, 3—disease of the liver, 1—congestion of the lungs, 3—inflammation of the lungs, 5—marasmus, 5—old age, 3—paralysis, 2—peritonitis, 1—premature birth, 2—puerperal disease, 2—rheumatism, 1—suicide, 1—syphilis, 1—teething, 2—tumor, 1—unk'n, 5—whooping cough, 3.

Under 5 years of age, 47—between 5 and 20 years, 12—between 20 and 40 years, 30—between 40 and 60 years, 16—above 60 years, 12. Born in the United States, 75—Ireland, 30—other places, 12.